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on the Mawson plate there are four between Hβ and Hγ, and four also between Hγ and Hδ, one of which adjoins Hδ; and one, the calcium line K, between Hι and Hζ.

The Isochromatic plate was exposed under rather worse atmospheric condition: the haze was thickening, and the star low down. The photograph is weak and the definition not good. But the positions of 14 lines were found to agree closely with those of *Nova Aurigæ* in 1892 February. The λ curve for the objective prism has not yet been plotted.

On the New Star in Perseus. By A. Stanley Williams.

A photograph of the region including *Nova Persei* was obtained here on the night of February 20 with a 4·4-inch Grubb portrait lens, and an exposure of 47 minutes (1901 February 20, $10^h\ 40^m$ to $11^h\ 27^m$ Greenwich mean time). There is no certain trace of the *Nova* visible upon this plate, which shows distinctly stars down to about the 12th magnitude, so that it must have been fainter than this at the time the photograph was taken. When discovered by Dr. Anderson on February 21 at $14^h\ 40^m$, the star had already attained a magnitude of 2·7, so that in an interval of not more, and probably less, than 28 hours a rise of about $9\frac{1}{2}$ magnitudes at least must have occurred.

Similar photographs were obtained on 1901 January 15 and 25 and February 11, on none of which is any certain trace of the star to be seen. There are two or three very minute stars visible near its place, but none of them appear to occupy exactly the same position.

The following eye-estimates of the brightness of the *Nova* were made by the writer.

1901 February 25, $11\frac{1}{2}^h$, *Nova* about midway between *Capella* and *α Persei*, but sky never perfectly clear.

	h	
Feb. 26	$11\frac{1}{2}$	3 steps brighter than *α Persei*
Feb. 28	10	3 steps brighter than *α Persei*
Mar. 1	$9\frac{1}{2}$	5 steps fainter than *α Persei*
Mar. 1	12	7 steps fainter than *α Persei*
Mar. 3	7 10^m	6 steps below *α Persei*, 2 steps below *β Persei*, 10 steps above *δ Persei*

In all these observations there was a bright Moon. On March 1 the *Nova* was also thought to be about equal to *Algol*, but comparison was unsatisfactory, owing to the difference in the colours of the two stars. Adopting the H.P. magnitudes of the comparison stars, and assuming the value of a step to be 0·1 mag-

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nitude, the following will be the provisional brightness of the new star on the H.P. scale :—

		h		
1901 Feb.	25	$11\frac{1}{2}$	mag.	=1·06
„	26	$11\frac{1}{2}$	„	=1·64
„	28	10	„	=1·64
Mar.	1	$9\frac{1}{2}$	„	=2·44
„	1	12	„	=2·64
„	3	7 10^{m}	„	=2·41

Judging from its powers of penetrating through cloud, the *Nova* was thought to be comparable with *Capella* on February 23. Its colour also appeared to be the same. With a $2\frac{3}{4}$-inch refractor the colour was noted as intense bright white on February 25, as yellowish on February 26, and as white—with perhaps a tinge of yellow—on March 3. With the naked eye, aided by spectacles, the colour has always been distinctly yellowish.

Hove: 1901 March 4.

A First Note on the Nova in Perseus. By Professor K. D. Naegamvala, M.A.

On the afternoon of February 25 the following telegram was received from Captain Molesworth, R.E., stationed at Trincomali, in Ceylon :—

"First magnitude star, *Perseus*, right ascension 3·24, declination north 44. Kindly reply whether *Nova* and examine spectrum."

The weather here has been very unfavourable of late, the sky being often overcast, and fleecy clouds present as a rule throughout. A single glance the same evening, however, left no doubt that the star was a *Nova*, fully as bright as *β Geminorum.* It was photographed with a 4-inch portrait lens with one minute's exposure, and a preliminary examination with a Vogel eyepiece spectroscope revealed a bright-lined spectrum. Two spectrograms were also taken the same evening with a prismatic camera composed of a Cooke triple objective of 93-inch focus and a prism of 45°. Owing to an unfortunate maladjustment of the prism the plates came out blank on development.

The next evening (February 26), and on the two following, the *Nova* was carefully observed with Vogel and McClean spectroscopes of varying dispersion applied to the 16-inch guiding

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